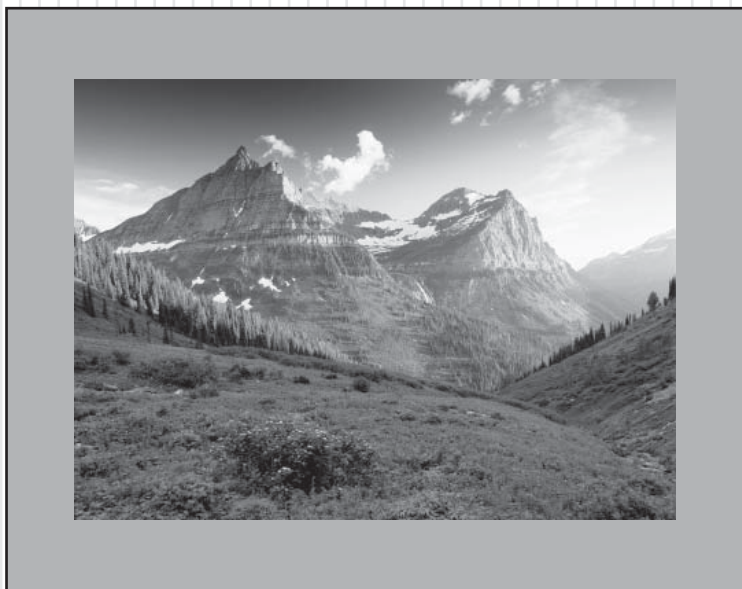


Montana
Comprehensive Assessment
System (MontCAS, Phase 2)
Criterion-Referenced Test (CRT)

COMMON CONSTRUCTED-RESPONSE ITEM RELEASE
MATHEMATICS, GRADE 5

2009



OFFICE OF PUBLIC INSTRUCTION

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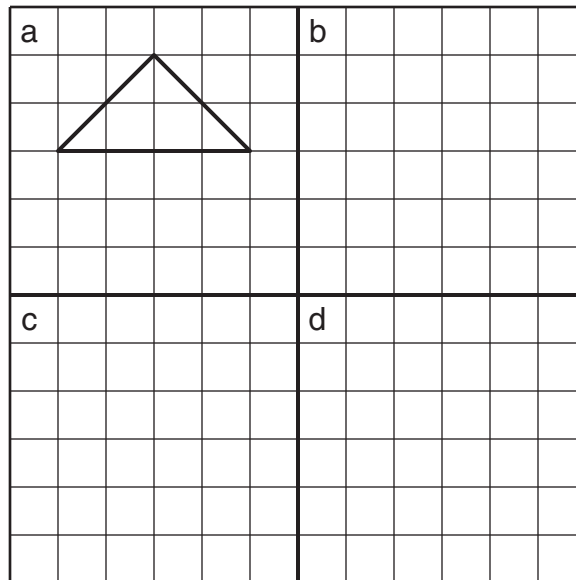
Mathematics

Session 1 (No Calculator)

You may **NOT** use a calculator during this session.

Write your answer in the space provided for it in your Student Response Booklet. Show all of your work.

25. Draw the coordinate grid and isosceles triangle shown below in your Student Response Booklet. Divide the grid into four sections and label the sections a, b, c, and d, as shown below.



- Look at the isosceles triangle in section a of your grid. Draw the line of symmetry.
- Think of a quadrilateral that has **exactly two** lines of symmetry.
 - Draw the quadrilateral in section b of your grid.
 - Draw the two lines of symmetry.
- Think of a quadrilateral that has **exactly four** lines of symmetry.
 - Draw the quadrilateral in section c of your grid.
 - Draw the four lines of symmetry.
- Think of a quadrilateral that has **no** lines of symmetry.
 - Draw the quadrilateral in section d of your grid.

Scoring Guide

Score	Description
4	4 points
3	$3 - 3\frac{1}{2}$ points
2	$2 - 2\frac{1}{2}$ points
1	$\frac{1}{2} - 1\frac{1}{2}$ points OR Response shows minimal understanding of symmetry.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.
Blank	No response.

Scoring Notes

Part a: 1 point draws the triangle with its line of symmetry

Part b: 1 point draws a quadrilateral with exactly two lines of symmetry shown

OR

$\frac{1}{2}$ point draws a quadrilateral with exactly two lines of symmetry, which are not shown

or

draws a polygon (except the answer to part a) with all correct lines of symmetry shown

Part c: 1 point draws a quadrilateral with exactly four lines of symmetry shown

OR

$\frac{1}{2}$ point draws a quadrilateral with exactly four lines of symmetry, which are not all shown

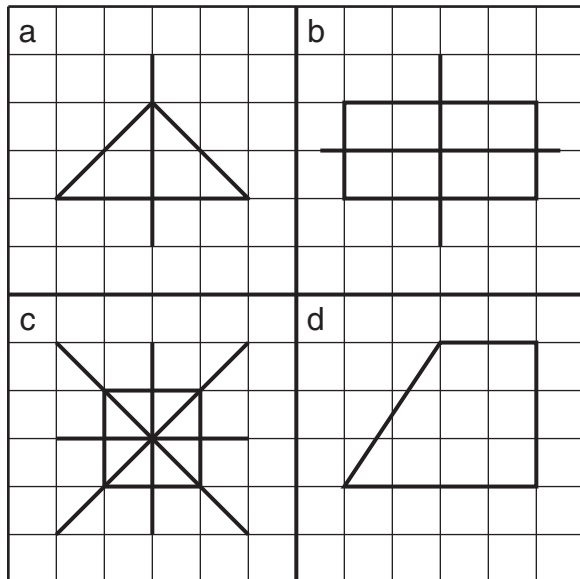
or

draws a polygon (except the answer to part a) with all correct lines of symmetry shown

Part d: 1 point draws a quadrilateral with no lines of symmetry

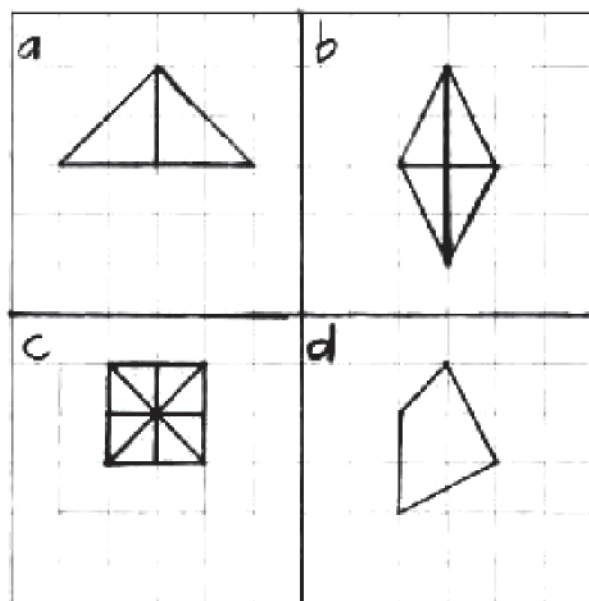
Notes:

- In part a, do not penalize the student for the accuracy of the drawing as long as he/she clearly shows understanding of where the line of symmetry is on the triangle in the Student Response Booklet.
- If the student draws the same figure in both parts b and c, award the credit in the part that the drawing is appropriate for. For example, if the student draws a square in both b and c, with all four lines of symmetry drawn, award 1 point for part c for a correct quadrilateral with lines of symmetry shown, and do not award the credit under the $\frac{1}{2}$ option in part b.

Sample Response:

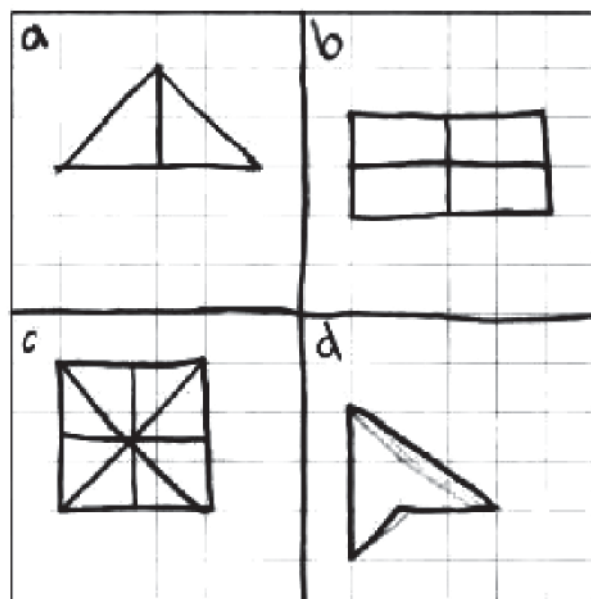
Score Point 4

Sample 1



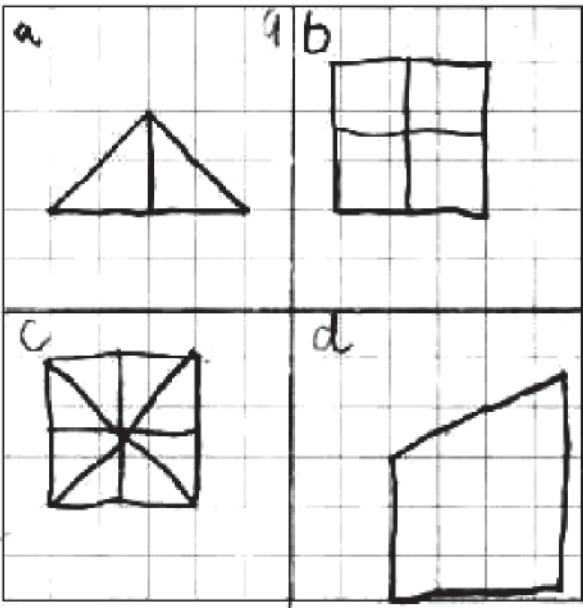
Score Point 4

Sample 2



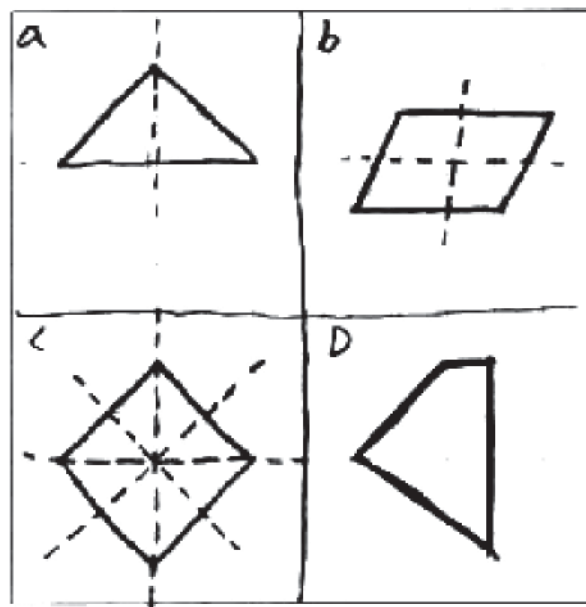
Score Point 3

Sample 1



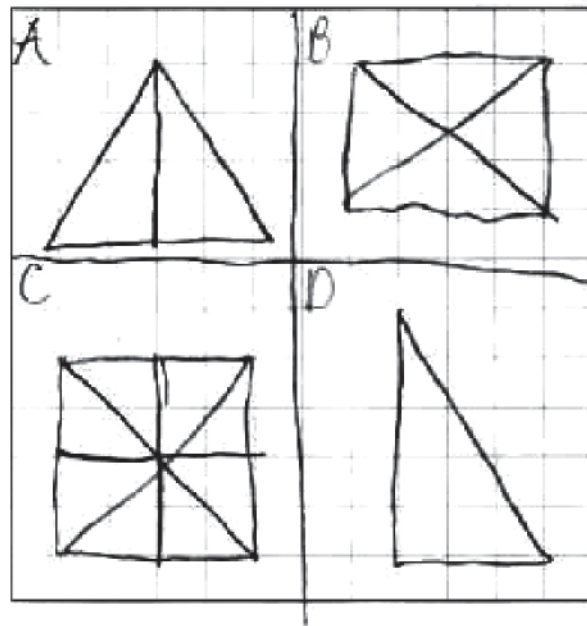
Score Point 3

Sample 2



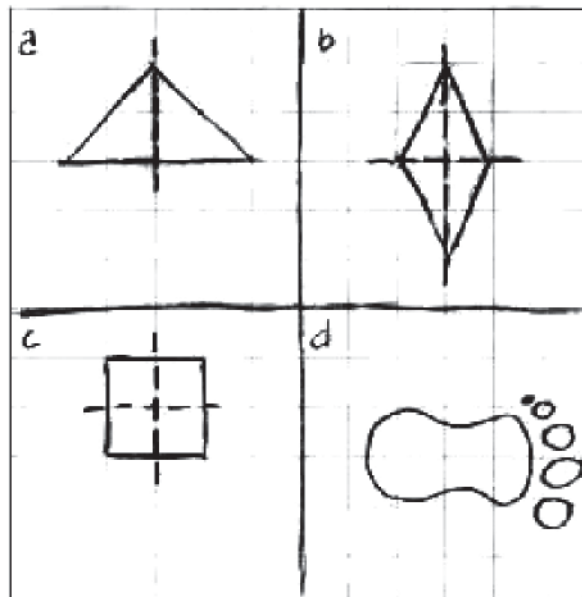
Score Point 2

Sample 1



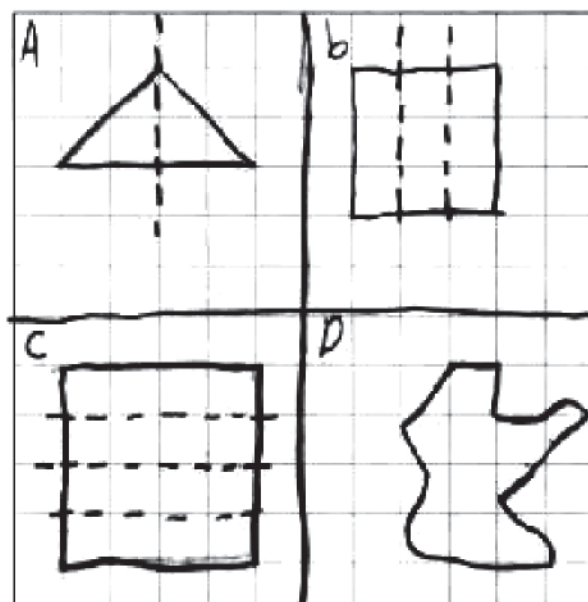
Score Point 2

Sample 2



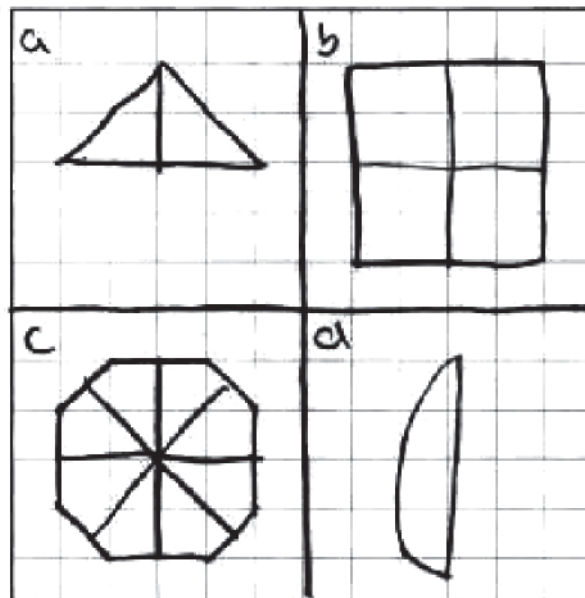
Score Point 1

Sample 1



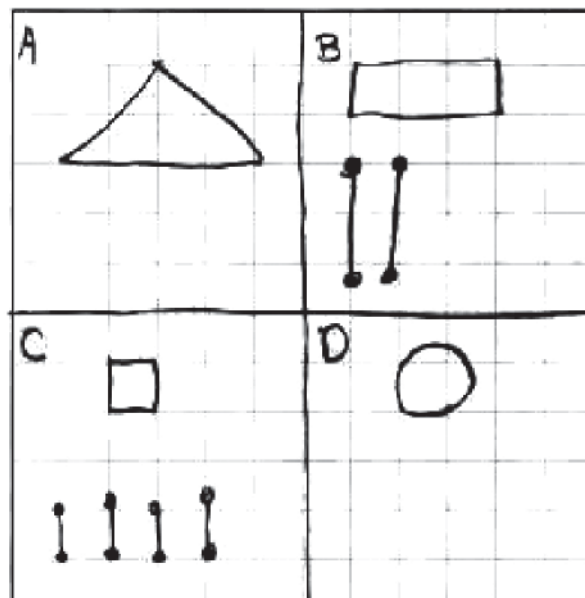
Score Point 1

Sample 2



Score Point 0

Sample 1



Score Point 0

Sample 2

